AnnAGNPS Version 2:

Output File Specifications

Output Specification Document for AnnAGNPS

CONCEPTS File Description Specification

The CONCEPTS file consists of two tables. The first identifies the file as an AnnAGNPS CONCEPTS file for the watershed and the simulation period analyzed. The second contains the non reach component event data. How much data is included in the file depends on the number of runoff producing components and the number of events that produce runoff.

CONCEPTS File Description

Description	Units	Domain	Format	Line No.	Field No.
Program Name - Program used to generate file.		**AnnAGNPS:**	A10	1	1
Program Version - Version of program that generated the output file. .		vx.xx.y.zz[1]	A5	1	2a
Blank field			5	1	2b
File Type - Hard coded name for file contents.		**CONCEPTS File**	A20	1	3-4
Blank field			20	1	5-6
File Date - Date file was created.	mm/dd/yyyy		A10	1	7
File Time - Time file was created.	hh:mm		A10	1	8
Watershed Name - Name of the watershed			A80	2	1-8
Record Identifier - Hard coded record label		**Simulation Period**	A20	3	1-2
Simulation Begin Date - Month, day, and year the watershed simulation begins.	mmm ddd yyyy	mmm - 1 to 12 ddd - 1 to 31 yyyy - 1 to 1000	2I3, I4	3	3
Simulation End Date - Month, day, and year the watershed simulation ends. Blank indicates a single event simulation .	mmm ddd yyyy	Blank, or mmm - 1 to 12 ddd - 1 to 31 yyyy - 1 to 1000	2I3, I4	3	4
Blank Line				4	

CONCEPTS Component Data

Description	Units {English} [SI] [2]	Domain {English} [SI]	Format	Line No.	Field No.
Event Component identifier - Alphanumeric string that identifies the component for the event .			A10	1	1
Event Date - Month, day, and year or the runoff event.	mmm ddd yyyy	mmm - 1 to 12 ddd - 1 to 31 yyyy - 1 to 1000	2I3, I4	1	2
Output Units code - Code for output in English or metric units: Y = English , N = SI		Y or N	A10	1	3
Component Type - Alphanumeric string identifying component type Acceptable component types are: Cell, Feedlot, Point Srce, Gully			A10	1	4

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[1] A version number stamp is a 10 character field including the "v", ".", and any trailing blanks because it is dynamic and changes whenever there is an revision or update. The "v" stands for version; the x's are the primary version indicators and are always numeric characters. The y and z's are secondary and generally will be internal unique version stamps. The y is always an alpha character and the z's are always numeric. For example, a complete version stamp could be: "v2.20.b.10". The combined characters are always to be interpreted in increasing order

[2] Output units are dependent on *CONCEPTS Unit Code*, both English and SI units are shown in this column.

Description	Units {English} [SI] [2]	Domain {English} [SI]	Format	Line No.	Field No.
Downstream Reach Id - Alphanumeric string that identifies the first channel reach the component influences. This is the receiving reach if component outputs are added at upstream end of a reach; the reach downstream of the component receiving reach or "Outlet" if component outputs are added at downstream end of a reach.			A10	1	5
Cell Area - Cell drainage area (Only used for cell components)	{acre} [hectare]	> 0.0	F10.3	1	6
Cell Tc - Cell time of concentration (Only used for cell components)	hr	> 0.0	F10.3	1	7
Cell ID – Cell Identifier associated with event component			A10	1	8
Blank field			10	2	1
Record identifier - Hard coded record label.		**Water**	A10	2	2
Blank field			10	2	3
Cell Event Rainfall - Rainfall (precipitation less snowfall) for the cell event.	{acre-ft} [hm^3]	$\geq$ 0.0	F10.3	2	4
Cell Event Uniform Water - Uniform time distributed water (snowmelt, and irrigation) for the cell event.	{acre-ft} [hm^3]	$\geq$ 0.0	F10.3	2	5
Cell Event Water Volume - Total runoff (rainfall, and snowmelt or irrigation) for the cell event.	{acre-ft} [hm^3]	$\geq$ 0.00	F10.3	2	6
Cell Peak Discharge	{acre-ft/s} {m^3/s}	> 0.00	F10.3	2	7
Cell Time to Peak Discharge	hr	> 0.00	F10.3	2	8
Blank field			10	3	1
Record identifier - Hard coded record label.		**Sediment**	A10	3	2
Blank field			10	3	3
Cell Event Sheet & Rill Sand - Mass of sand in sheet and rill sediment for event from cell.	{tons} [metric tons]	$\geq$ 0.0	F10.3	3	4
Cell Event Sheet & Rill Silt - Mass of silt in sheet and rill sediment for event from cell.	{tons} [metric tons]	$\geq$ 0.0	F10.3	3	5
Cell Event Sheet & Rill Clay - Mass of clay in sheet and rill sediment for event from cell..	{tons} [metric tons]	$\geq$ 0.0	F10.3	3	6
Blank Field			10	3	7
Blank Field			10	3	8
Blank field			10	4	1
Record identifier - Hard coded record label.		**Nitrogen**	A10	4	2
Blank field			10	4	3
Cell Event Attached Nitrogen -Mass of Nitrogen attached to sediment for event from cell.	{tons} [metric tons]	$\geq$ 0.0	F10.3	4	4
Cell Event Dissolved Nitrogen -Mass of dissolved Nitrogen for event from cell..	{tons} [metric tons]	$\geq$ 0.0	F10.3	4	5
Blank field (3)			A30	4	6-8
Blank field			10	5	1
Record identifier - Hard coded record label.		**Org Carbon**	A10	5	2
Blank field			10	5	3
Cell Event Attached Organic Carbon -Mass of organic carbon attached to sediment for event from cell	{tons} [metric tons]	$\geq$ 0.0	F10.3	5	4
Cell Event Dissolved Organic Carbon -Mass of dissolved organic carbon for event from cell	{tons} [metric tons]	$\geq$ 0.0	F10.3	5	5
Blank field (3)			A30	5	6-8
Blank field			10	6	1
Record identifier - Hard coded record label.		**Phosphorus**	A10	6	2
Blank field			10	6	3

Description	Units {English} [SI] [2]	Domain {English} [SI]	Format	Line No.	Field No.
Cell Event Attached Phosphorus -Mass of Phosphorus attached to sediment for event from cell	{tons} [metric tons]	≥ 0.0	F10.3	6	4
Cell Event Dissolved Phosphorus -Mass of dissolved Phosphorus for event from cell	{tons} [metric tons]	≥ 0.0	F10.3	6	5
Blank field (3)			A30	6	6-8
The following line is output for each pesticide that is contained in the runoff water or attached to sediment					
Blank field			10	7	1
Record identifier - Hard coded record label.		**Pesticide**	A10	7	2
Pesticide Name - Alphanumeric string that is the common name of the pesticide			A40	7	3-6
Cell Event Attached Pesticide -Mass of pesticide attached to sediment for event from cell	{tons} [metric tons]	≥ 0.0	F10.3	7	7
Event Dissolved Pesticide -Mass of pesticide for event from cell	{tons} [metric tons]	≥ 0.0	F10.3	7	8
Blank Line				4	

CONCEPTS File Layout Matrix

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
AnnAGNPS	**v1.xx**	**CONCEPTS File**				File Date	File Time
Watershed Name							
Simulation Period		Begin Date	End Date				

The following matrix will appear for each watershed component that contributes water, sediment, nutrients, and/ or pesticides to the stream system on a given day. All components for given day are grouped together Not all records in the matrix may be present for each component event. Records with all zero data are not included. Pesticide records may appear multiple times if more than one pesticide is contained in output from a component ..

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
Component Id	Event Date	Output Units	Component Type	Downstream Reach Id	Cell Area	Cell Tc	Cell ID
	Water		Rainfall	Snowmelt, point source & irrigation	Water Volume	Peak Discharge	Time to Peak
	Sediment		Sand	Silt	Clay		
	Nitrogen		Attached N	Soluble N			
	Org Carbon		Attached org C	Soluble org C			
	Phosphorus		Attached P	Soluble P			
	Pesticide		Pesticide Id			Attached Pesticide	Soluble Pesticide

Event File Description Specification

The event file consists of three tables. The first identifies the file as an AnnAGNPS event file for the watershed and the simulation period analyzed. The second describes the reaches that are to be include in the event file and the third table contains the reach event data. How much data is included in the file is under the user's control.

Event File Description

Description	Units	Domain	Format	Line No.	Field No.
Program Name - Program used to generate file.		**AnnAGNPS:**	A10	1	1
Program Version - Version of program that generated the output file.		vx.xx.y.zz	A5	1	2a
Blank field			5	1	2b
File Type - Hard coded name for file contents.		**Event File**	A10	1	3
Blank fields (3)			30	1	4-6
File Date - Date file was created.	mm/dd/yyyy		A10	1	7
File Time - Time file was created.	hh:mm		A10	1	8
Watershed Name - Name of the watershed			A80	2	1-8
Record Identifier - Hard coded record label		**Simulation Period**	A20	3	1-2
Simulation Begin Date - Month, day, and year the watershed simulation begins.	mmm ddd yyyy	mmm - 1 to 12 ddd - 1 to 31 yyyy - 1 to 1000	2I3, I4	3	3
Simulation End Date - Month, day, and year the watershed simulation ends. Blank indicates a single event simulation .	mmm ddd yyyy	Blank, or mmm - 1 to 12 ddd - 1 to 31 yyyy - 1 to 1000	2I3, I4	3	4
Blank Line				4	

Reach Description Data

Description	Units	Domain	Format	Line No.	Field No.
Repeat 2 line set for each reach that is specified for event output.					
Event Reach identifier -Alphanumeric string identifying the channel reach for the event. The watershed outlet reach is output by default and does not need to be specified. Identifier must be identical name of a reach in the watershed.			A10	1	1
Event Water code - Code for event peak flow and volume output for the reach. Acceptable codes are: Y = yes N = no		Y or N	A2	1	2a
Event Water Temperature code - Code for event water temperature output for the reach. Acceptable codes are: Y = yes N = no		Y or N	A2	1	2b
Event Sediment Class code - Code for event sediment output by particle class for the reach. Acceptable codes are: Y = yes N = no		Y or N	A2	1	2c
Event Sediment Class/Source code - Code for event sediment output by particle classes (clay, silt, sand, small aggregate, and large aggregate) and source (sheet & rill, gully, and bed & bank) for the reach. Acceptable codes are: Y = yes N = No		Y or N	A2	1	2d
Event Sediment Source code - Code for event sediment output by source (sheet & rill, gully, and bed & bank) for the reach. Acceptable codes are: Y = yes N = no		Y or N	A2	1	2e
Event Nitrogen code - Code for event Nitrogen output for the reach. Acceptable codes are: Y = yes N = no		Y or N	A2	1	3a
Event Phosphorus code - Code for event Phosphorous output for the reach. Acceptable codes are: Y = yes N = no		Y or N	A2	1	3b
Event Organic Carbon code - Code for event organic Carbon output for the reach. Acceptable codes are: Y = yes N = no		Y or N	A2	1	3c
Event Pesticide code - Code for event pesticide output for the reach. Acceptable codes are: Y = yes N = no		Y or N	A2	1	3d
Blank field			10	2	1
Event Location Description - Description of the location of the reach specified for event. (Optional)			A60	2	2-7
Blank Line				3	

Outlet Description Data

Description	Units	Domain	Format	Line No.	Field No.
Outlet identifier - Hard coded identifier.		**Outlet**	A10	1	1
Outlet Water code - Code for outlet volume output. Acceptable codes are: Y = yes N = no		Y or N	A2	1	2a
Outlet Water Temperature code - Code for outlet water temperature output. Acceptable codes are: Y = yes N = no		Y or N	A2	1	2b
Outlet Sediment Class/Source code - Code for outlet sediment output by particle class. Acceptable codes are: Y = yes N = no		Y or N	A2	1	2c
Outlet Sediment Class code - Code for outlet sediment output by particle classes (clay, silt, sand, small aggregate, and large aggregate) and source (sheet & rill, gully, and bed & bank). Acceptable codes are: Y = yes N = No		Y or N	A2	1	2d
Outlet Sediment Source code - Code for outlet sediment output by source (sheet & rill, gully, and bed & bank). Acceptable codes are: Y = yes N = no		Y or N	A2	1	2e
Outlet Nitrogen code - Code for outlet Nitrogen output. Acceptable codes are: Y = yes N = no		Y or N	A2	1	3a
Outlet Phosphorus code - Code for outlet Phosphorous output. Acceptable codes are: Y = yes N = no		Y or N	A2	1	3b

Outlet Organic Carbon code - Code for outlet organic Carbon output. Acceptable codes are: Y = yes N = no		Y or N	A2	1	3c
Outlet Pesticide code - Code for outlet pesticide output. Acceptable codes are: Y = yes N = no		Y or N	A2	1	3d
Blank Line				3	

Event Reach Data

Description	Units {English} [SI] [3]	Domain {English} [SI]	Format	Line No.	Field No.
Event Reach identifier - Alphanumeric string that identifies the channel reach for the event .			A10	1	1
Event Date - Month, day, and year or the runoff event.	mmm ddd yyyy	mmm - 1 to 12 ddd - 1 to 31 yyyy - 1 to 1000 1 to 12	2I3, I4	1	2
Output Units code - Code for output in English or metric units: Y = English , N = SI		Y or N	A10	1	3
The following 2 lines are output if Event Water code is selected.					
Blank field			10	2	1
Record identifier - Hard coded record label.		**Water**	A10	2	2
Reach End - Hard coded label for end of reach to associated data with.		**Dnstream**	A10	2	3
Event Rainfall (Down) - Rainfall (precipitation less snowfall) applied at downstream end of reach.	{acre-ft} [hm^3]	≥ 0.0	F10.3	2	4
Event Uniform Water (Down) - Uniform time distributed water (snowmelt, point source, and irrigation) applied at downstream end of reach.	{acre-ft} [hm^3]	≥ 0.0	F10.3	2	5
Event Water Volume (Down) - Accumulated current day water at downstream end of reach.	{acre-ft} [hm^3]	≥ 0.00	F10.3	2	6
Event Peak Flow (Down) - Current day peak flow at downstream end of reach.	{ft^3/sec} [m^3/sec]	≥ 0.0	F10.3	2	7
Blank field			10	3	1
Record identifier - Hard coded record label.		**Water**	A10	3	2
Reach End - Hard coded label for end of reach to associated data with.		**Upstream**	A10	3	3
Event Rainfall (Up) -Rainfall (precipitation less snowfall) applied at upstream end of reach.	{acre-ft} [hm^3]	≥ 0.0	F10.3	3	4
Event Uniform Water (Up) - Uniform time distributed water (snowmelt, point source, and irrigation) applied at upstream end of reach.	{acre-ft} [hm^3]	≥ 0.0	F10.3	3	5
Event Water Volume (Up) - Accumulated current day water at upstream end of reach.	{acre-ft} [hm^3]	≥ 0.00	F10.3	3	6
Event Peak Flow (Up) - Current day peak flow at upstream end of reach.	{ft^3/sec} [m^3/sec]	≥ 0.0	F10.3	3	7
The following 6 lines are output if Event Sediment Class/Source code is selected.					
Blank field			10	4	1
Record identifier - Hard coded record label.		**Bed & Bank**	A10	4	2
Reach End - Hard coded label for end of reach to associated data with.		**Dnstream**	A10	4	3
Event Bed & Bank Clay (Down) -Accumulated current day mass of clay in bed and bank sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	4	4
Event Bed & Bank Silt (Down) -Accumulated current day mass of silt in bed and bank sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	4	5
Event Bed & Bank Sand (Down) -Accumulated current day mass of sand in bed and bank sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	4	7
Event Bed & Bank Sm Agg (Down) -Accumulated current day mass of small aggregate in bed and bank sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	4	6
Event Bed & Bank Lg Agg (Down) -Accumulated current day mass of large aggregate in bed and bank sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	4	8
Blank field			10	5	1
Record identifier - Hard coded record label.		**Bed & Bank**	A10	5	2

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[3] Output units are dependent on *Output Unit code*, both English and SI units are shown in this column.

Description	Units {English} [SI] [3]	Domain {English} [SI]	Format	Line No.	Field No.
Reach End - Hard coded label for end of reach to associated data with.		**Upstream**	A10	5	3
Event Bed & Bank Clay (Up) - Accumulated current day mass of clay in bed and bank sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	5	4
Event Bed & Bank Silt (Up) - Accumulated current day mass of silt in bed and bank sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	5	5
Event Bed & Bank Sand (Up) - Accumulated current day mass of sand in bed and bank sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	5	7
Event Bed & Bank Sm Agg (Up) - Accumulated current day mass of small aggregate in bed and bank sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	5	6
Event Bed & Bank Lg Agg (Up) - Accumulated current day mass of large aggregate in bed and bank sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	5	8
Blank field			10	6	1
Record identifier - Hard coded record label.		**Gully**	A10	6	2
Reach End - Hard coded label for end of reach to associated data with.		**Dnstream**	A10	6	3
Event Gully Clay (Down) - Accumulated current day mass of clay in gully sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	6	4
Event Gully Silt (Down) - Accumulated current day mass of silt in gully sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	6	5
Event Gully Sand (Down) - Accumulated current day mass of sand in gully sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	6	7
Event Gully Sm Agg (Down) - Accumulated current day mass of small aggregate in gully sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	6	6
Event Gully Lg Agg(Down) - Accumulated current day mass of large aggregate in gully sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	6	8
Blank field			10	7	1
Record identifier - Hard coded record label.		**Gully**	A10	7	2
Reach End - Hard coded label for end of reach to associated data with.		**Upstream**	A10	7	3
Event Gully Clay (Up) - Accumulated current day mass of clay in gully sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	7	4
Event Gully Silt (Up) - Accumulated current day mass of silt in gully sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	7	5
Event Gully Sand (Up) - Accumulated current day mass of sand in gully sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	7	6
Event Gully Sm Agg (Up) - Accumulated current day mass of small aggregate in gully sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	7	7
Event Gully Lg Agg (Up) - Accumulated current day mass of large aggregate in gully sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	7	8
Blank field			10	8	1
Record identifier - Hard coded record label.		**Sheet&Rill**	A10	8	2
Reach End - Hard coded label for end of reach to associated data with.		**Dnstream**	A10	8	3
Event Sheet & Rill Clay (Down) - Accumulated current day mass of clay in sheet and rill sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	8	3
Event Sheet & Rill Silt (Down) - Accumulated current day mass of silt in sheet and rill sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	8	4
Event Sheet & Rill Sand (Down) - Accumulated current day mass of sand in sheet and rill sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	8	5
Event Sheet & Rill Sm Agg (Down) - Accumulated current day mass of small aggregate in sheet and rill sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	8	6
Event Sheet & Rill Lg Agg (Down) - Accumulated current day mass of large aggregate in sheet and rill sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	8	7
Blank field			10	9	1
Record identifier - Hard coded record label.		**Sheet&Rill**	A10	9	2

Description	Units {English} [SI] [3]	Domain {English} [SI]	Format	Line No.	Field No.
Reach End - Hard coded label for end of reach to associated data with.		**Upstream**	A10	9	3
Event Sheet & Rill Clay (Up) - Accumulated current day mass of clay in sheet and rill sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	9	4
Event Sheet & Rill Silt (Up) - Accumulated current day mass of silt in sheet and rill sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	9	5
Event Sheet & Rill Sand (Up) - Accumulated current day mass of sand in sheet and rill sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	9	6
Event Sheet & Rill Sm Agg (Up) - Accumulated current day mass of small aggregate in sheet and rill sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	9	7
Event Sheet & Rill Lg Agg (Up) - Accumulated current day mass of large aggregate in sheet and rill sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	9	8
The following 2 lines are output if Event Sediment Class code is selected.					
Blank field		v	10	10	1
Record identifier - Hard coded record label.		**Size Total**	A10	10	2
Reach End - Hard coded label for end of reach to associated data with.		**Dnstream**	A10	10	3
Event Sediment Clay (Down) - Accumulated current day mass of clay in sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	10	4
Event Sediment Silt (Down) - Accumulated current day mass of silt in sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	10	5
Event Sediment Sand (Down) - Accumulated current day mass of sand in sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	10	6
Event Sediment Sm Agg (Down) - Accumulated current day mass of small aggregate in sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	10	7
Event Sediment Lg Agg (Down) - Accumulated current day mass of large aggregate in sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	10	8
Blank field			10	11	1
Record identifier - Hard coded record label.		**Size Total**	A10	11	2
Reach End - Hard coded label for end of reach to associated data with.		**Upstream**	A10	11	3
Event Sediment Clay (Up) - Accumulated current day mass of clay in sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	11	4
Event Sediment Silt (Up) - Accumulated current day mass of silt in sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	11	5
Event Sediment Sand (Up) - Accumulated current day mass of sand in sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	11	6
Event Sediment Sm Agg (Up) - Accumulated current day mass of small aggregate in sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	11	7
Event Sediment Lg Agg (Up) - Accumulated current day mass of large aggregate in sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	11	8
The following line is output if sediment by source (*event_sed_source_code*) is selected.					
Blank field		v	10	12	1
Record identifier - Hard coded record label.		**Source Tot**	A10	12	2
Reach End - Hard coded label for end of reach to associated data with.		**Dnstream**	A10	12	3
Event Bed & Bank (Down) - Accumulated current day mass of bed and bank sediment at the downstream end of the reach.	{tons} [metric tons]	≥ 0.0	F10.3	12	4
Event Gully (Down) - Accumulated current day mass of gully sediment at the downstream end of the reach.	{tons} [metric tons]	≥ 0.0	F10.3	12	5
Event Sheet & Rill (Down) - Accumulated current day mass of sheet and rill sediment at the downstream end of the reach.	{tons} [metric tons]	≥ 0.0	F10.3	12	6
Event Total Sediment (Down) - Accumulated current day mass of total sediment at the downstream end of the reach.	{tons} [metric tons]	≥ 0.0	F10.3	12	7
Blank field			10	13	1
Record identifier - Hard coded record label.		**Source Tot**	A10	13	2

Description	Units {English} [SI] [3]	Domain {English} [SI]	Format	Line No.	Field No.
Reach End - Hard coded label for end of reach to associated data with.		**Upstream**	A10	13	3
Event Bed & Bank (Up) - Accumulated current day mass of bed and bank sediment at the upstream end of the reach.	{tons} [metric tons]	≥ 0.0	F10.3	13	4
Event Gully (Up) - Accumulated current day mass of gully sediment at the upstream end of the reach.	{tons} [metric tons]	≥ 0.0	F10.3	13	5
Event Sheet & Rill (Up) - Accumulated current day mass of sheet and rill sediment at the upstream end of the reach.	{tons} [metric tons]	≥ 0.0	F10.3	13	6
Event Total Sediment (Up) - Accumulated current day mass of total sediment at the upstream end of the reach.	{tons} [metric tons]	≥ 0.0	F10.3	13	7
The following line is output if Event Nitrogen code is selected.					
Blank field				14	1
Record identifier - Hard coded record label.		**Nitrogen**	A10	14	2
Blank field				14	3
Event Attached Nitrogen (Down) -Accumulated current day mass of Nitrogen attached to sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	14	4
Event Dissolved Nitrogen (Down) -Accumulated current day mass of dissolved Nitrogen at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	14	5
Event Attached Nitrogen (Up) -Accumulated current day mass of Nitrogen attached to sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	14	6
Event Dissolved Nitrogen (Up) -Accumulated current day mass of dissolved Nitrogen at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	14	7
The following line is output if Event Organic Carbon code is selected.					
Blank field				15	1
Record identifier - Hard coded record label.		**Org Carbon**	A10	15	2
Blank field				15	3
Event Attached Organic Carbon (Down) -Accumulated current day mass of organic carbon attached to sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	15	4
Event Dissolved Organic Carbon (Down) -Accumulated current day mass of dissolved organic carbon at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	15	5
Event Attached Organic Carbon (Up) -Accumulated current day mass of organic carbon attached to sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	15	6
Event Dissolved Organic Carbon (Up) -Accumulated current day mass of dissolved organic carbon at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	15	7
The following line is output if Event Phosphorus code is selected.					
Blank field				16	1
Record identifier - Hard coded record label.		**Phosphorus**	A10	16	2
Blank field				16	3
Event Attached Phosphorus (Down) -Accumulated current day mass of Phosphorus attached to sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	16	4
Event Dissolved Phosphorus (Down) -Accumulated current day mass of dissolved Phosphorus at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	16	5
Event Attached Phosphorus (Up) -Accumulated current day mass of Phosphorus attached to sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	16	6
Event Dissolved Phosphorus (Up) -Accumulated current day mass of dissolved Phosphorus at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	16	7
The following 2 lines are output for each pesticide that is currently in the reach if the Event Pesticide code is selected.					
Blank field				17	1
Record identifier - Hard coded record label.		**Pesticide**	A10	17	2
Pesticide Name - Alphanumeric string that is the common name of the pesticide			A40	17	3-6

Description	Units {English} [SI] [3]	Domain {English} [SI]	Format	Line No.	Field No.
Event Attached Pesticide (Down) -Accumulated current day mass of pesticide attached to sediment at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	17	7
Event Dissolved Pesticide (Down) -Accumulated current day mass of pesticide at downstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	17	8
Six Blank fields			60	18	1-6
Event Attached Pesticide (Up) -Accumulated current day mass of pesticide attached to sediment at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	18	7
Event Dissolved Pesticide (Up) -Accumulated current day mass of pesticide at upstream end of reach.	{tons} [metric tons]	≥ 0.0	F10.3	18	8

Event Outlet Data

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Outlet identifier - Hard coded label for the outlet		**Outlet**	A10	1	1
Event Date - Month, day, and year or the runoff event.	mmm ddd yyyy	mmm - 1 to 12 ddd - 1 to 31 yyyy - 1 to 1000 1 to 12	2I3, I4I3	1	2
Output Units code - Code for output in English or metric units: Y = English , N = SI		Y or N	A10	1	3
The following 2 lines are output if Output Water code is selected.					
Blank field			10	2	1
Record identifier - Hard coded record label.		**Water**	A10	2	2
Blank field			10	2	3
Event Rainfall - Rainfall (precipitation less snowfall) applied at outlet.	{acre-ft} [hm^3]	≥ 0.0	F10.3	2	4
Event Uniform Water - Uniform time distributed water (snowmelt, point source, and irrigation) applied at outlet.	{acre-ft} [hm^3]	≥ 0.0	F10.3	2	5
Event Water Volume - Accumulated current day water volume at outlet.	{acre-ft} [hm^3]	≥ 0.00	F10.3	2	6
Blank fields			20	2	7-8
The following 3 lines are output if Outlet Sediment Class/Source code is selected.					
Blank field			10	3	1
Record identifier - Hard coded record label.		**Bed & Bank**	A10	3	2
Blank field			10	3	3
Event Bed & Bank Clay -Accumulated current day mass of clay in bed and bank sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	3	4
Event Bed & Bank Silt -Accumulated current day mass of silt in bed and bank sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	3	5
Event Bed & Bank Sand -Accumulated current day mass of sand in bed and bank sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	3	7
Event Bed & Bank Sm Agg -Accumulated current day mass of small aggregate in bed and bank sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	3	6
Event Bed & Bank Lg Agg -Accumulated current day mass of large aggregate in bed and bank sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	3	8
Blank field			10	4	1
Record identifier - Hard coded record label.		**Gully**	A10	4	2
Blank field			10	4	3
Event Gully Clay - Accumulated current day mass of clay in gully sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	4	4
Event Gully Silt - Accumulated current day mass of silt in gully sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	4	5
Event Gully Sand - Accumulated current day mass of sand small aggregate in gully sediment at outlet	{tons} [metric tons]	≥ 0.0	F10.3	4	6
Event Gully Sm Agg - Accumulated current day mass of small aggregate sand in gully sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	4	7
Event Gully Lg Agg - Accumulated current day mass of large aggregate in gully sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	4	8
Blank field			10	5	1
Record identifier - Hard coded record label.		**Sheet&Rill**	A10	5	2
Blank field			10	5	3

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Event Sheet & Rill Clay - Accumulated current day mass of clay in sheet and rill sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	5	3
Event Sheet & Rill Silt - Accumulated current day mass of silt in sheet and rill sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	5	4
Event Sheet & Rill Sand - Accumulated current day mass of sand in sheet and rill sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	5	5
Event Sheet & Rill Sm Agg - Accumulated current day mass of small aggregate in sheet and rill sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	5	6
Event Sheet & Rill Lg Agg - Accumulated current day mass of large aggregate in sheet and rill sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	5	7
The following 2 lines are output if Outlet Sediment Class is selected.					
Blank field				6	1
Record identifier - Hard coded record label.		**Size Total**	A10	6	2
Blank field				6	3
Event Sediment Clay - Accumulated current day mass of clay in sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	6	4
Event Sediment Silt - Accumulated current day mass of silt in sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	6	5
Event Sediment Sand - Accumulated current day mass of sand in sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	6	6
Event Sediment Sm Agg - Accumulated current day mass of small aggregate in sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	6	7
Event Sediment Lg Agg - Accumulated current day mass of large aggregate in sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	6	8
The following line is output if sediment by source Outlet Sediment Source is selected.					
Blank field				7	1
Record identifier - Hard coded record label.		**Source Tot**	A10	7	2
Blank field				7	3
Event Bed & Bank - Accumulated current day mass of bed and bank sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	7	4
Event Gully - Accumulated current day mass of gully sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	7	5
Event Sheet & Rill - Accumulated current day mass of sheet and rill sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	7	6
Event Total Sediment - Accumulated current day mass of total sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	7	7
Blank field				7	8
The following line is output if Output Nitrogen code is selected.					
Blank field				8	1
Record identifier - Hard coded record label.		**Nitrogen**	A10	8	2
Blank field				8	3
Event Attached Nitrogen -Accumulated current day mass of Nitrogen attached to sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	8	4
Event Dissolved Nitrogen -Accumulated current day mass of dissolved Nitrogen at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	8	5
Blank fields				8	6-8
The following line is output if Outlet Organic Carbon code is selected.					
Blank field				9	1
Record identifier - Hard coded record label.		**Org Carbon**	A10	9	2
Blank field				9	3
Event Attached Organic Carbon -Accumulated current day mass of organic carbon attached to sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	9	4

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Event Dissolved Organic Carbon -Accumulated current day mass of dissolved organic carbon at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	9	5
Blank fields			10	9	6-8
The following line is output if Outlet Phosphorus code is selected.					
Blank field			10	10	1
Record identifier - Hard coded record label.		**Phosphorus**	A10	10	2
Blank field			10	10	3
Event Attached Phosphorus -Accumulated current day mass of Phosphorus attached to sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	10	4
Event Dissolved Phosphorus -Accumulated current day mass of dissolved Phosphorus at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	10	5
Blank fields			10	10	6-8
The following line is output for each pesticide that is currently at the outlet if the Outlet Pesticide code is selected.					
Blank field			10	11	1
Record identifier - Hard coded record label.		**Pesticide**	A10	11	2
Pesticide Name - Alphanumeric string that is the common name of the pesticide			A40	11	3-6
Event Attached Pesticide -Accumulated current day mass of pesticide attached to sediment at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	11	7
Event Dissolved Pesticide -Accumulated current day mass of pesticide at outlet.	{tons} [metric tons]	≥ 0.0	F10.3	11	8

Event File Layout Matrix

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
AnnAGNPS	v1.xx	Event File				File Date	File Time
Watershed Name							
Simulation Period		Begin Date	End Date				

The following matrix repeats for each selected Reach Id in the watershed.

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
Reach Id		Output Codes					
	Reach Description						

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
Outlet		Output Codes					

The following two matrixes will appear for each day that water flow exists in the watershed.

Not all records in the two matrixes may be present (depending on user selected output codes). Pesticide records may appear multiple times. The first matrix will repeat for each selected Reach ID that has water flow. The second matrix appears once.

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
Reach Id	Event Date	Output Units					
	Water	Dnstream!	Rainfall	Snowmelt, pt source and irrigation	Water Volume	Peak Flow	
	Water	Upstream	Rainfall	Snowmelt, pt source and irrigation	Water Volume	Peak Flow	
	Bed & Bank	Dnstream	Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Bed & Bank	Upstream	Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Gully	Dnstream	Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Gully	Upstream	Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Sheet&Rill	Dnstream	Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Sheet&Rill	Upstream	Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Size Total	Dnstream	Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Size Total	Upstream	Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Source Tot	Dnstream	Bed & Bank Accum	Gully Accum	Sheet & Rill Accum	Tot Sediment Accum	
	Source Tot	Upstream	Bed & Bank Accum	Gully Accum	Sheet & Rill Accum	Tot Sediment Accum	
	Nitrogen		Downstream Attached N Accum	Downstream Soluble N Accum	Upstream Attached N Accum	Upstream Soluble N Accum	
	Org Carbon		Downstream Attached org C Accum	Downstream Soluble org C Accum	Upstream Attached org C Accum	Upstream Soluble org C Accum	
	Phosphorus		Downstream Attached P Accum	Downstream Soluble P Accum	Upstream Attached P Accum	Upstream Soluble P Accum	
	Pesticide		Pesticide Id			Downstream Attached Pesticide Accum	Downstream Soluble Pesticide Accum
						Upstream Attached Pesticide Accum	Upstream Soluble Pesticide Accum

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
Outlet	Event Date	Output Units					
	Water		Rainfall	Snowmelt, pt source and irrigation	Water Volume		
	Bed & Bank		Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Gully		Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Sheet&Rill		Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Size Total		Clay Accum	Silt Accum	Sand Accum	Sm Aggregate Accum	Lg Aggregate Accum
	Source Tot		Bed & Bank Accum	Gully Accum	Sheet & Rill Accum	Tot Sediment Accum	
	Source Tot		Bed & Bank Accum	Gully Accum	Sheet & Rill Accum	Tot Sediment Accum	
	Nitrogen		Attached N Accum	Soluble N Accum			
	Org Carbon		Attached org C Accum	Soluble org C Accum			
	Phosphorus		Attached P Accum	Soluble P Accum			
	Pesticide	Pesticide Id				Attached Pesticide Accum	Soluble Pesticide Accum

Source Accounting File Specification

Three tables are included in this file. The first identifies the file as an AnnAGNPS source accounting file for the watershed and the simulation period analyzed. The second is the Reach Accumulation data, including accumulations at all reaches included in the Event file and the watershed outlet.. The Source Ratio data then follows in the third table.

Source Accounting File Description

Description	Units	Domain	Format	Line No.	Field No.
Program Name - Program used to generate file.		**AnnAGNPS:**	A10	1	1
Program Version - Version of program that generated the output file.		vx.xx.y.zz	A5	1	2a
File Type - Hard coded name for file contents		**Source Accounting File**	A25	1	2b-4
Blank fields (2)			20	1	5-6
File Date - Date file was created.	mm/dd/yyyy		A10	1	7
File Time - Time file was created.	hh:mm		A10	1	8
Watershed Name - Name of the watershed			A80	2	1-8
Record Identifier - Hard coded record label		**Simulation Period**	A20	3	1-2
Simulation Begin Date - Month, day, and year the watershed simulation begins.	mmm ddd yyyy	mmm - 1 to 12 ddd - 1 to 31 yyyy - 1 to 1000	2I3, I4	3	3
Simulation End Date - Month, day, and year the watershed simulation ends. Blank indicates a single event simulation.	mmm ddd yyyy	Blank, or mmm - 1 to 12 ddd - 1 to 31 yyyy - 1 to 1000	2I3, I4	3	4
Blank Line				4	

Base Reach and Watershed Outlet Accumulation Data

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Section Header Name - Hard coded section name. (Left Justified)		**Simulation Accumulation:**	A40	1	1-4
Number Accumulation Locations - Count of oulet and all event file reach locations that are affected by source accounting.			I10		5
Base or Outlet identifier - Alphanumeric string that identifies the base reach or 'Outlet" for the accumulation data			A10	2	1
Base reach location - Alphanumeric string identifyting whech end if the reach is the data applies to. Acceptable values are "Upstream". Leave blank watershed outlet.			A10	2	2
Base or Outlet Water code - Code for outlet volume output. Acceptable codes are: Y = yes N = no		Y or N	A2	2	3a
Base or Outlet Sediment Class/Source code - Code for outlet sediment output by particle class. Acceptable codes are: Y = yes N = no		Y or N	A2	2	3b
Base or Outlet Sediment Class code - Code for outlet sediment output by particle classes (clay, silt, sand, small aggregate, and large aggregate) and source (sheet & rill, gully, and bed & bank). Acceptable codes are: Y = yes N = No		Y or N	A2	2	3c

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Base or Outlet Sediment Source code - Code for outlet sediment output by source (sheet & rill, gully, and bed & bank). Acceptable codes are: Y = yes N = no		Y or N	A2	2	3d
Base or Outlet Nutrient code - Code for outlet nutrient output. Acceptable codes are: Y = yes N = no		Y or N	A2	2	3e
Base or Outlet Pesticide code - Code for outlet pesticide output. Acceptable codes are: Y = yes N = no		Y or N	A2	2	4a
Blank field			8	2	4b-4e
Output Units code - Code for output in English or metric units: Y = English , N = SI			A10	2	5
The following line is output if Outlet Water code is selected					
Blank field			10	3	1
Record identifier - Hard coded record label.		**Water**	A10	3	2
Blank fields			30	3	3-5
Simulation Water Volume - Accumulated simulation period water routed through reach or at outlet	{acre-ft} [hm^3]	≥ 0.00	F10.3	3	6
Blank fields			20	2	7-8
The following 3 lines are output if sediment by particle Outlet Sediment Class/Source code is selected.					
Blank field			10	4	1
Record identifier - Hard coded record label.		**Bed & Bank**	A10	4	2
Simulation Bed & Bank Clay - Accumulated simulation period mass of clay in bed and bank sediment at outlet	{ton} [metric ton]	≥ 0.0	F10.3	4	3
Simulation Bed & Bank Silt - Accumulated simulation period mass of silt in bed and bank sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	4	4
Simulation Bed & Bank Sand - Accumulated simulation period mass of sand in bed and bank sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	4	6
Simulation Bed & Bank Sm Agg - Accumulated simulation period mass of small aggregate in bed and bank sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	4	5
Simulation Bed & Bank lg Agg - Accumulated simulation period mass of large aggregate in bed and bank sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	4	7
Blank field			10	5	1
Record identifier - Hard coded record label.		**Gully**	A10	5	2
Simulation Gully Clay - Accumulated simulation period mass of clay in gully sediment at outlet	{ton} [metric ton]	≥ 0.0	F10.3	5	3
Simulation Gully Silt - Accumulated simulation period mass of silt in gully sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	5	4
Simulation Gully Sand - Accumulated simulation period mass of sand in gully sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	5	4
Simulation Gully Sm Agg - Accumulated simulation period mass of small aggregate in gully sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	5	4
Simulation Gully Lg Agg - Accumulated simulation period mass of large aggregate in gully sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	5	5
Blank field			10	6	1
Record identifier - Hard coded record label.		**Sheet&Rill**	A10	6	2

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Simulation Sheet & Rill Clay - Accumulated simulation period mass of clay in sheet and rill sediment at outlet	{ton} [metric ton]	≥ 0.0	F10.3	6	3
Simulation Sheet & Rill Silt - Accumulated simulation period mass of silt in sheet and rill sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	6	4
Simulation Sheet & Rill Sand - Accumulated simulation period mass of sand in sheet and rill sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	6	5
Simulation Sheet & Rill Sm Agg - Accumulated simulation period mass of small aggregate in sheet and rill sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	6	6
Simulation Sheet & Rill Lg Agg - Accumulated simulation period mass of large aggregate in sheet and rill sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	6	7
The following line is output if Outlet Sediment Class code is selected.					
Blank field			10	7	1
Record identifier - Hard coded record label.		**Size Total**	A10	7	2
Simulation Clay - Accumulated simulation period mass of clay in sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	7	3
Simulation Silt - Accumulated simulation period mass of silt in sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	7	4
Simulation Sand - Accumulated simulation period mass of sand in sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	7	5
Simulation Sm Agg - Accumulated simulation period mass of small aggregate in sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	7	6
Simulation Lg Agg - Accumulated simulation period mass of large aggregate in sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	7	7
The following line is output if Outlet Sediment Source code) is selected.					
Blank field			10	8	1
Record identifier - Hard coded record label.		**Source Tot**	A10	8	2
Simulation Bed & Bank - Accumulated simulation period mass of bed and bank sediment at the upstream end of the base reach or the outlet.	{ton} [metric ton]	≥ 0.0	F10.3	8	3
Simulation Gully - Accumulated simulation period mass of gully sediment at the downstream end of the reach.	{ton} [metric ton]	≥ 0.0	F10.3	8	4
Simulation Sheet & Rill - Accumulated simulation period mass of sheet and rill sediment at the upstream end of the base reach or the outlet.	{ton} [metric ton]	≥ 0.0	F10.3	8	5
Simulation Total Sediment - Accumulated simulation period mass of total sediment at the upstream end of the base reach or the outlet.	{ton} [metric ton]	≥ 0.0	F10.3	8	6
The following line is output if Outlet Nutrient code is selected.					
Blank field			10	9	1
Record identifier - Hard coded record label.		**Nutrients**	A10	9	2
Simulation Attached Nitrogen - Accumulated simulation period mass of Nitrogen attached to sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	9	3
Simulation Dissolved Nitrogen - Accumulated simulation period mass of dissolved Nitrogen at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	9	4
Simulation Attached Organic Carbon - Accumulated simulation period mass of organic carbon attached to sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	9	5

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Simulation Dissolved Organic Carbon - Accumulated simulation period mass of dissolved organic carbon at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	9	6
Simulation Attached Phosphorus - Accumulated simulation period mass of Phosphorus attached to sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	9	7
Simulation Dissolved Phosphorus - Accumulated simulation period mass of dissolved Phosphorus at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	9	8
The following line is output for each pesticide accumulated at the outlet if Outlet Pesticide code is selected.					
Blank field			10	10	1
Record identifier - Hard coded record label.		**Pesticide**	A10	10	2
Pesticide Name - Alphanumeric string of the pesticide common name.			A40	10	3-6
Simulation Attached Pesticide -Accumulated simulation period mass of pesticide attached to sediment at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	10	7
Simulation Dissolved Pesticide -Accumulated simulation period mass of dissolved pesticide at upstream end of base reach or at outlet	{ton} [metric ton]	≥ 0.0	F10.3	10	8
Blank Line				Last	

Source Accounting Ratio Output Data

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Section Header Name - Hard coded section name. (Left Justified)		**Source Ratios:**	A40	1	1-4
Number Source Ratios - Count of source ratio components that follow.			I10		5
Source Accounting Identifier - Alphanumeric string that identifies the component where the user desires source accounting output. Identifier must be identical name of the cell or other component type in the watershed.			A10	1	1
Component Type - Alphanumeric string identifying source accounting area (or landuse type for cells) specified by the source accounting identifier. Acceptable component types are: Feedlot, Point Srce, Gully, Terrace, Reach Acceptable land use types for cells are: Cropland, Pasture, Rangeland, Forest, Urban, Water			A10	1	2
Source Accounting Description -Location description of the source accounting area specified by the source accounting identifier (optional)			A60	1	3-8
Blank field			10	2	1
Refernce Identifier - Watershed Id (base reach or Outlet) for the point that the source accounting ratios are valid			A10	2	2
Field Identifier Only used for cell and feedlot components.			A10	2	3
Measurement Variable - Measurement of component type. For cells it is the cell drainage area, for reaches it is the reach length and for all other components it is 1.0	None or , {acre-feet} [hectare-m]	1.0 or, > 0.0	F10.3	2	4
Source Accounting Water code - Code for water output from source accounting area. Acceptable codes are: Y = yes N = no		Y, or N	A2	2	5a
Source Accounting Total Sediment code - Code for total sediment output by particle class (size) from source accounting area. Acceptable codes are: Y = yes N = no		Y, or N	A2	2	5b
Source Accounting Sediment Class/Source code - Code for sediment output by particle classes (clay, silt, sand, small aggregate, and large aggregate) and source (sheet & rill, gully, and bed & bank) from source accounting area. Acceptable codes are: Y = yes N = no		Y, or N	A2	2	5c
Source Accounting Sediment Source code - Code for sediment output by source (sheet & rill, gully, and bed & bank) from source accounting area. Acceptable codes are: Y = yes N = no		Y or N	A2	2	5d
Source Accounting Nutrient code - Code for nutrient (Nitrogen, organic Carbon, & Phosphorus) output from source accounting area. Acceptable codes are: Y = yes N = no		Y, or N	A2	2	5e
Source Accounting Pesticide code - Code for pesticide output from source accounting area. Acceptable codes are: Y = yes N = no		Y, or N	A2	2	6a
Blank field			8	2	6b-6e
Reach End - Code for end of Reach reference. Values are: 1 = upstream end 2 = downstream end. Only valid for reach components		Blank, 1 or 2	I10	2	7
Output Units code - Code for output in English or metric units. Acceptable values are: Y = English N = SI			A10	2	8
The following line is output if Source Accounting Water code is selected.					
Blank field			10	3	1
Record identifier - Hard coded record label.		**Water**	A10	3	2
Simulation Water - Accumulated simulation period water from source accounting component.	{ac-ft} [hm^3]	≥ 0.00	F10.3	3	3

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Ratio Water - Ratio of accumulated simulation period water from the source accounting component contributed to upstream end of base reach or at outlet. .		≥ 0.00	F10.5	3	4
The following line is output if Source Accounting Sediment Class/Source code is selected and the Component Type is Reach.					
Blank field			10	4	1
Record identifier - Hard coded record label.		**Bed & Bank**	A10	4	2
Ratio Bed & Bank Clay - Ratio of accumulated simulation period mass of clay in bed and bank sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	4	3
Ratio Bed & Bank Silt - Ratio of accumulated simulation period mass of silt in bed and bank sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	4	4
Ratio Bed & Bank Sand - Ratio of accumulated simulation period mass of small aggregate in bed and bank sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	4	5
Ratio Bed & Bank Sm Agg - Ratio of accumulated simulation period mass of sand in bed and bank sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	4	6
Ratio Bed & Bank Lg Agg - Ratio of accumulated simulation period mass of large aggregate in bed and bank sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	4	7
The following 2 lines are output if Source Accounting Sediment Class/Source code is selected.					
Blank field			10	5	1
Record identifier - Hard coded record label.		**Gully**	A10	5	2
Ratio Gully Clay - Ratio of accumulated simulation period mass of clay in gully sediment contributing to amount at watershed outlet.		≥ 0.0	F10.5	5	3
Ratio Gully Silt - Ratio of accumulated simulation period mass of silt in gully sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	5	4
Ratio Gully Sand - Ratio of accumulated simulation period mass of sand in gully sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	5	4
Ratio Gully Sm Agg - Ratio of accumulated simulation period mass of small aggregate in gully sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	5	4
Ratio Gully Lg Agg - Ratio of accumulated simulation period mass of large aggregate in gully sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	5	5
Blank field			10	6	1
Record identifier - Hard coded record label.		**Sheet&Rill**	A10	6	2
Ratio Sheet & Rill Clay - Ratio of accumulated simulation period mass of clay in sheet and rill sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	6	3
Ratio Sheet & Rill Silt - Ratio of accumulated simulation period mass of silt in sheet and rill sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	6	4
Ratio Sheet & Rill Sand - Ratio of accumulated simulation period mass of sand in sheet and rill sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	6	5

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Ratio Sheet & Rill Sm Agg - Ratio of accumulated simulation period mass of small aggregate in sheet and rill sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	6	6
Ratio Sheet & Rill Lg Agg - Ratio of accumulated simulation period mass of large aggregate in sheet and rill sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	6	7
The following line is output if Source Accounting Sediment Class code is selected.					
Blank field			10	7	1
Record identifier - Hard coded record label.		**Size Total**	A10	7	2
Ratio Clay - Ratio of accumulated simulation period mass of clay in sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	7	3
Ratio Silt - Ratio of accumulated simulation period mass of silt in sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	7	4
Ratio Sand - Ratio of accumulated simulation period mass of sand in sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	7	5
Ratio Sm Agg - Ratio of accumulated simulation period mass of small aggregate in sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	7	6
Ratio Lg Agg - Ratio of accumulated simulation period mass of large aggregate in sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	7	7
The following line is output if Source Accounting Sediment Source code is selected.					
Blank field			10	8	1
Record identifier - Hard coded record label.		**Source Tot**	A10	8	2
Ratio Bed & Bank - Ratio of accumulated simulation period mass of bed and bank sediment at the upstream end of the base reach or Out;et.		≥ 0.0	F10.5	8	4
Ratio Gully - Ratio of accumulated simulation period mass of gully sediment at the upstream end of the base reach. or Outlet		≥ 0.0	F10.5	8	5
Ratio Sheet & Rill - Ratio of accumulated simulation period mass of sheet and rill sediment at the upstream end of the base reach or Outlet.		≥ 0.0	F10.5	8	6
Ratio Total Sediment - Ratio of accumulated simulation period mass of total sediment at the upstream end of the base reach or Outlet		≥ 0.0	F10.5	8	7
The following line is Source Accounting Nutrient code is selected.					
Blank field			10	9	1
Record identifier - Hard coded record label.		**Nutrients**	A10	9	2
Ratio Attached Nitrogen - Ratio of accumulated simulation period mass of Nitrogen attached to sediment contributing to amount at watershed outlet.		≥ 0.0	F10.5	9	3
Ratio Dissolved Nitrogen - Ratio of accumulated simulation period mass of dissolved Nitrogen contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	9	4
Ratio Attached Organic Carbon - Ratio of accumulated simulation period mass of organic carbon attached to sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	9	5
Ratio Dissolved Organic Carbon - Ratio of accumulated simulation period mass of dissolved organic carbon contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	9	6
Ratio Attached Phosphorus - Ratio of accumulated simulation period mass of Phosphorus attached to sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	9	7

Description	Units {English} [SI]	Domain {English} [SI]	Format	Line No.	Field No.
Ratio Dissolved Phosphorus - Ratio of accumulated simulation period mass of dissolved Phosphorus contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	9	8
The following line is output for each pesticide from the component that contributes to the outlet or sink if the Source Accounting Pesticide code is selected.					
Blank field			10	10	1
Record identifier - Hard coded record label.		**Pesticide**	A10	10	2
Pesticide Name - Alphanumeric string that is the common name of the pesticide			A40	10	3-6
Ratio Attached Pesticide -Ratio of accumulated simulation period mass of pesticide attached to sediment contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	10	7
Ratio Dissolved Pesticide -Ratio of accumulated simulation period mass of dissolved pesticide contributing to amount at upstream end of base reach or at outlet.		≥ 0.0	F10.5	10	8
Blank Line				11	

Source Accounting File Layout Matrix

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
AnnAGNPS	**v1.xx**	**Source Accounting File**				File Date	File Time
Watershed Name							
Simulation Period		Begin Date	End Date				

The following tables repeats for each bas reach (identified as Event File input) and watershed Outlet. Not all records in the following matrix may be present (depending on output codes). Pesticide records may appear multiple times.

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
Simulation Accumulation:				# Accumulation Locations			
Outlet or Reach Id	Blank or **'Upstream'**	Output Codes		Output Units			
	Water				Water Volume		
	Bed & Bank	Clay Accum	Silt Accum	Sand Accum	Sm Aggreate Accum	Lg Aggregate Accum	
	Gully	Clay accum	Silt Accum	Sand Accum	Sm Aggreate Accum	Lg Aggregate Accum	
	Sheet&Rill	Clay accum	Silt Accum	Sand Accum	Sm Aggreate Accum	Lg Aggregate Accum	
	Size Total	Clay accum	Silt Accum	Sand Accum	Sm Aggreate Accum	Lg Aggregate Accum	
	Source Tot	Bed & Bank Accum	Gully Accum	Sheet & Rill Accum	Tot Sediment Accum		
	Nutrients	Attached N Accum	Soluble N Accum	Attached org C Accum	Soluble org C Accum	Attached P Accum	Soluble P Accum
	Pesticide	Pesticide Id				Attached Pesticide Accum	Soluble Pesticide Accum

The following tables repeats for each bas reach (identified as Event File input) that has ratio data and watershed Outlet. Not all records in the following matrix may be present (depending on output codes). Pesticide records may appear multiple times.

Data Field 1	Data Field 2	Data Field 3	Data Field 4	Data Field 5	Data Field 6	Data Field 7	Data Field 8
Source Ratios:				# Source Components			
Source Id	Component / Landuse Type	Description					
	Reach Id	Field Id	Area, Length or 1.0	Output Codes		Reach End Code	Output Units
	Water	Accum Water	Ratio of Water				
	Bed & Bank	Clay ratio	Silt Ratio	Sand Ratio	Sm Aggreate Ratio	Lg Aggregate Ratio	
	Gully	Clay ratio	Silt Ratio	Sand Ratio	Sm Aggreate Ratio	Lg Aggregate Ratio	
	Sheet&Rill	Clay ratio	Silt Ratio	Sand Ratio	Sm Aggreate Ratio	Lg Aggregate Ratio	
	Size Total	Clay ratio	Silt Ratio	Sand Ratio	Sm Aggreate Ratio	Lg Aggregate Ratio	
	Source Tot	Bed & Bank Ratio	Gully Ratio	Sheet & Rill Ratio	Tot Sediment Ratio		
	Nutrients	Attached N Ratio	Soluble N Ratio	Attached organic C Ratio	Soluble organic C Ratio	Attached P Ratio	Soluble P Ratio
	Pesticide	Pesticide Id				Attached Pesticide Ratio	Soluble Pesticide Ratio